December 2, 2016

Committee: Provider and Community Education Subcommittee

Title: The need for alignment of the 2000 EMS Education Agenda for the Future: A Systems

Approach, the 2005 National EMS Core Content, the 2007 National EMS Scope of Practice

Model, and the 2009 National EMS Education Standards with the current practice of EMS

medicine

Issue Synopsis:

1. Problem statement

The 1996 EMS Agenda for the Future was a visionary document that cited the need for

the improvement of EMS education in a systematic manner. The EMS Education Agenda

for the Future: A Systems Approach was published by NHTSA in June 2000, and this

document identified four integral components to achieve this goal. It was subsequently

followed by the publication of the National EMS Core Content in 2005, the National EMS

Scope of Practice Model in February 2007, and the National EMS Education Standards in

January 2009. At the time, the authors and contributors of these documents

intentionally narrowed their focus solely to the traditional role of the provision of

emergency care and patient transport to definitive care. Specialty care, non-transport

of patients, and partnerships with public health and public safety agencies were not

addressed. Due to the significant advancements in medicine, the needs and

expectations of the general public have evolved, as have the expectations and

capabilities of emergency medical services (EMS) professionals.

Although not their intended purpose, organizations within and outside of the

healthcare arena utilize these documents as a nationally accepted reference for the

landscape of EMS when creating their organizational policies and standards. Likewise,

state EMS offices that adopted the National EMS Scope of Practice Model as written

through legislative avenues are now hindered by a document that has remained

stagnant for 10 years. States without legislative barriers have independently amended their respective EMS scopes of practice to be more compliant with the current standards of care. One of the goals of the *National EMS Core* Content, the *National EMS Scope of Practice Model*, and the *National EMS Education Standards* was to increase the uniformity among our nation's EMS systems. In their original form, this goal is gradually being defeated by the very documents that were written to achieve this measure. While useful at the time of their initial publication, it is imperative for these documents to maintain currency with the contemporary and evidence-based practice of EMS medicine to retain their value.

Resources/references related to the issue

- 1. The National Highway Traffic Safety Administration, *Emergency Medical Services:* Agenda for the Future, September 1996
- 2. The National Highway Traffic Safety Administration, *Emergency Medical Services Education Agenda for the Future: A Systems Approach*, June 2000
- 3. The National Highway Traffic Safety Administration, *National EMS Core Content*, July 2005
- 4. The National Highway Traffic Safety Administration, *National EMS Scope of Practice Model*, February 2007
- 5. The National Highway Traffic Safety Administration, *National EMS Education Standards*, January 2009
- 6. Institute of Medicine of the National Academies of Sciences, *The 2009 H1N1 Influenza Campaign: Summary of a Workshop Series*, October 29, 2010
- 7. U.S. Department of Health and Human Services, Health Resources and Services Administration, *Community Paramedicine: Evaluation Tool*, March 2012
- 8. Association of State and Territorial Health Officials, Expanding the Roles of Emergency Medical Services Providers: A Legal Analysis, 2014
- 9. National Association of State EMS Officials, NASEMSO National Model EMS Clinical Guidelines, October 2014
- 10. National Association of State EMS Officials, *REPLICA* (Recognition of EMS Personnel Licensure Interstate CompAct), September 2014
- 11. Perina, Debra G., Pons, Peter T., et al., *The Core Content of Emergency Medical Services Medicine*, <u>Prehospital Emergency Care</u>, July-September 2012, 16(3):309-322

12. Smith, E. Reed, Delaney, John B., *A New Response: Supporting Paradigm Change in EMS' Operational Medical Response to Active Shooter Events*, <u>Journal of Emergency Medical Services</u>, December 2013, pp. 48-50

2. Crosswalk with other standards documents or past recommendations

National Highway Traffic Safety Administration, National EMS Core Content, July 2005: http://www.ems.gov/education/EMSCoreContent.pdf

NEMSAC Final Advisory on Evidence-Based Guidelines for EMS System Design, 2012: http://www.ems.gov/nemsac/SystemsCommitteeAdvisoryonEBGsforSystemDesign.pdf

NEMSAC Final Advisory on Next Steps for Prehospital Evidence-Based Guidelines, 2012: http://www.ems.gov/nemsac/MedicalOversightResearchCommittee%20Advisory-NextStepsPrehospitalGuidelines.pdf

NEMSAC Final Advisory on Community Paramedicine, 2014: http://www.ems.gov/pdf/nemsac/NEMSAC-Final-Advisory-on-Community-Paramedicine-dec2014.pdf

3. Analysis

The EMS Agenda for the Future was truly visionary when it was published in September 1996. The document acknowledged the state of EMS at that time and provided foresight for the goals that should be achieved by the EMS profession in the future. The authors identified fourteen EMS attributes, and educations systems was one of the attributes proposed for continued development. The citation of this EMS attribute led to the creation of the 2000 EMS Education Agenda for the Future: A System Approach, a launch pad to unify and advance EMS in a systematic manner. This document called for a foundation that included a framework comprised of a core content, scope of practice, education standards, certification, and accreditation for EMS. As a result, the 2005 National EMS Core Content, the 2007 National EMS Scope of Practice Model, and the 2009 EMS Education Standards were published.

Since the publications of these documents, the practice of medicine, including prehospital medicine, has evolved significantly. Importantly, the American Board of Medical Specialties recognized EMS as the practice of medicine on September 23, 2010. Factors that contributed to this historic milestone include the exponential growth and publication of quality EMS research, use of performance improvement strategies to improve EMS practice, advancements in the capabilities of emergency medical dispatch, and an increasing level of standardization across the United States. Many of the features of EMS systems and the roles, patient care practices, administrative and operational responsibilities of EMS practitioners are cited in *The Core Content of Emergency Medical Services Medicine* document created by the American Board of Emergency Medicine.

The Patient Protection and Affordable Care Act enforces a recent shift in our health care system, including EMS, toward outpatient patient care and management with a focus on best practices, improved patient outcomes, and responsible resource utilization. Patients play a greater role in their health care, and due to multiple factors, the public has become more knowledgeable about treatment options and accepted medical standards. Yet, the existing scope of practice from 2007 and the associated education standards do not recognize current evidence-based practice for managing time-critical diagnoses such as acute myocardial infarction, stroke, trauma, or sepsis. It also fails to contemplate the varied components and vital needs of successful specialty care initiatives that include, but are not limited to, tactical EMS, community paramedicine and mobile integrated healthcare, and critical care EMS. Other examples of how these standards have become outdated include the prevalence of point-of-care testing, one component of which, i.e. blood glucose monitoring, is now a critical element of information in the triage and transport decision-making process for potential stroke victims. The increase in the number of life-saving medications that have been approved for administration via auto-injector and other minimally or non-invasive

routes has positively impacted the emergency response for EMS personnel, laypersons, first responders with a duty to act such as law enforcement personnel, and patients providing self-care. This includes, but is not limited to, epinephrine for anaphylaxis, naloxone in the face of a growing epidemic of opioid-related overdose deaths, benzodiazepines for seizures, and antidotes for the weapons of mass destruction and austere environments both of which are increasingly encountered in civilian settings. Patients with infusing medications and artificial devices such as left ventricular assist devices are managed in their home environment instead of being retained for months in an intensive care or telemetry unit. Formerly, EMS was limited to a narrow role of response and transport as a secondary and distinctly separate adjunct to the emergency department. Through innovation and events that generated healthcare crises, the EMS profession has demonstrated enormous value during the emergent missions of law enforcement and public health agencies and in the daily routine efforts of physicians and communities to deliver out-of-hospital and preventive health care. In 2016, EMS is an established multi-disciplinary system operating as a collegial partner at the confluence of public health, public safety, and healthcare.

As directed by the *EMS Agenda for the Future*, EMS has transitioned to an integrated vital sector of the healthcare system through expanding roles, responsibilities, and capabilities. It is impossible to keep pace with the current and emerging science in the previously traditional and now escalating specialty care roles of EMS if the scope of practice and the education standards remain stagnant. The expectations of the public implore the EMS profession to be dynamic, in a systematic manner, to meet the medical needs of the community.

4. Committee conclusions

The National EMS Advisory Council commends the Department of Transportation, NHTSA, and the task force teams that generated the inaugural *National EMS Scope of*

Practice Model and EMS Education Agenda for the Future: A Systems Approach documents. Their valuable work, which will never be forgotten, laid a solid foundation upon which our EMS system can build and flourish.

EMS has been formally recognized as the practice of medicine. As a result, the bar for our expected standards for patient care, initial and continuing education, performance measures, and responsibility to retain currency with data-proven measures has been raised significantly. The challenges facing our nation are constant and ever-changing. The growth of our aging population, upward trend of violent threats, and the associated needs of the community and responders are not going to disappear. Whether it is the Legionnaire's disease outbreak of the past, the national opioid crisis of today, or the unforeseen natural or man-made disaster that generates a healthcare crisis or need for mass immunizations in the future, EMS practitioners must be prepared and supported to respond and save lives. Unfortunately, the original EMS Education Agenda for the Future: A Systems Approach and National EMS Scope of Practice Model documents are now limiting the ability of the contemporary EMS profession to achieve its full capabilities.

The NEMSAC should request the revision of the EMS Education Agenda for the Future: A Systems Approach, National EMS Core Content, National EMS Scope of Practice Model, and EMS Education Standards documents. The second edition of these documents should align with the current practice of EMS medicine and written using language that incorporates the flexibility for EMS systems to adjust to patient and community needs in a nimble fashion. The revision is an excellent opportunity to solidify the role of EMS as a vital asset and to fulfill the recommendation of the integration of EMS into our nation's healthcare system as cited in Emergency Medical Services: EMS Agenda for the Future.

Recommended Actions/Strategies:

Recommendation #1:

The Department of Transportation and the National Highway Traffic Safety Administration should convene a multi-disciplinary task force comprised of EMS practitioners, educators, stakeholders, subject matter experts, and healthcare consumers to revise the EMS Education Agenda for the Future: A Systems Approach, the National EMS Core Content, the National EMS Scope of Practice Model, and the National EMS Education Standards EMS Education Agenda for the Future: A Systems Approach for alignment with the current practice of EMS medicine.

Recommendation #2:

The National Highway Traffic Safety Administration should facilitate the provision of evidence-based guidelines, data generated from the National EMS Information System (NEMSIS), and EMS research literature to the multi-disciplinary task forces with the goal of achieving improved patient outcomes during the revision of the EMS Education Agenda for the Future: A Systems Approach, the National EMS Core Content, the National EMS Scope of Practice Model, and the National EMS Education Standards EMS Education Agenda for the Future: A Systems Approach documents.

Recommendation #3:

The Department of Transportation and the National Highway Traffic Safety Administration should support the inclusion of current and emerging EMS specialty care roles and the results of their respective practice analyses, if not previously completed, in the revised EMS Education Agenda for the Future: A Systems Approach and National EMS Scope of Practice Model documents.

Recommendation #4:

- 1. The Department of Transportation and the Federal Interagency Committee on EMS should seek funding for the revision of the EMS Education Agenda for the Future: A Systems Approach, the National EMS Core Content, the National EMS Scope of Practice Model, and the National EMS Education Standards EMS Education Agenda for the Future: A Systems Approach documents.
- 2. The Department of Transportation and the Federal Interagency Committee on EMS should seek funding for periodic 5-year reviews of the EMS Education Agenda for the Future: A Systems Approach, the National EMS Core Content, the National EMS Scope of Practice Model, and the National EMS Education Standards EMS Education Agenda for the Future: A Systems Approach documents to maintain currency with the practice of EMS medicine, alignment with improved patient outcomes, and utility to the EMS community.

Recommendation #5:

The National EMS Advisory Council should develop a process to address potential amendments to the EMS Education Agenda for the Future: A Systems Approach and/or any of its components (National EMS Core Content, National EMS Scope of Practice Model, National EMS Education Standards) when quality data indicates or events generate a national healthcare crisis.